

## Claims

1. A dispersion management system for soliton or soliton-like transmission systems in which fibres of opposite sign dispersions are concatenated together characterised in that the duration of a dispersion compensation phase is short in comparison with the propagation interval in the remainder of the system and that the path average dispersion is anomalous.
2. A dispersion management system for soliton or soliton-like transmission systems according to claim 1 characterised in that the system excludes arrangements in which the dispersion map of one fibre (N) is substantially closer to zero than that of its complementary fibre (A).
3. A dispersion management system for soliton or soliton-like transmission systems according to claim 2 characterised in that the difference between fibre dispersions is less than  $12.0\text{ps}^2/\text{km}$ .
4. A dispersion management system for soliton or soliton-like transmission systems according to claim 2 characterised in that the difference between fibre dispersions is less than  $4.0\text{ps}^2/\text{km}$ .
5. A dispersion management system for soliton or soliton-like transmission systems according to claim 2 characterised in that the difference between fibre dispersions is less than  $0.1\text{ps}^2/\text{km}$ .
6. A dispersion management system for soliton or soliton-like transmission systems according to claim 1 characterised in that compensation is provided by discrete dispersion compensator means.

add  
a1  
add  
c8